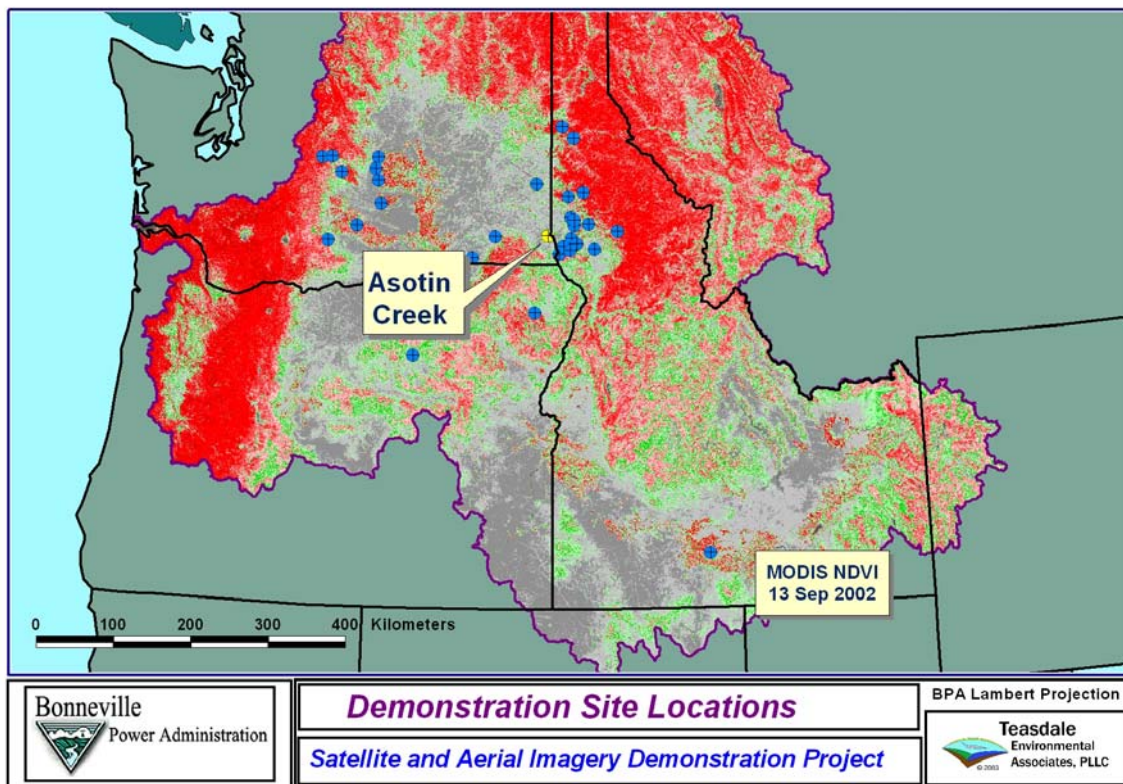


Asotin Creek Demonstration Site	
Location	Asotin County, WA
Water body	Asotin Creek
Ecological Provenance	Blue Mountain
Subbasin Name	Asotin
BPA Hydrologic Unit Code ID	3891
Hydrologic Unit Code, 6 th Level	170601031202
Watershed Name	Lower Snake-Asotin



Unique Characteristics

Asotin Creek is an alluvial stream in high relief terrain prone to significant channel reformation during significant hydrologic events. The riparian zone is relatively narrow and quickly transitions to seasonally dry canyon land vegetation. Residential and agricultural development occupy the riparian zone along most of the stream.

Satellite imagery for this site include Landsat 5, Landsat 7 and ASTER. Digital aerial color infrared aerial imagery was acquired on October 1, 2002. Ancillary data includes topographic DRG's, DOQ's, watershed boundaries and national land cover data. The imagery and

supporting data reveal the characteristics of riparian vegetation and stream channel.

Objective

The primary objective was to observe the Asotin Creek riparian zone in satellite and aerial imagery.

Results

The presence of the relatively narrow riparian zone could be detected in both Landsat and ASTER visible-infrared. Trees cover could be separated from pasture with ASTER imagery with high probability. Tree discrimination was more difficult with Landsat depending on patch size. Tree, pasture and developed land could be distinguished in the Color CIR. The extent of the riparian zone appeared little changed in the 1990 and 2002 Landsat images. Canyon shadows reduce the effectiveness of late fall satellite imagery. Cloud shadows somewhat reduced the interpretability of the aerial CIR images.